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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/686,780	10/10/2000	James T. Klosowski	YOR920000688US1	4874

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EXAMINER

THANGAVELU, KANDASAMY

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

09/686,780

Applicant(s)

KLOSOWSKI ET AL.

Examiner

Kandasamy Thangavelu

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 21 January 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The reply was filed after the date of filing a Notice of Appeal, but prior to the date of filing an appeal brief. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Attachment-A. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1-3,5 and 6.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s): _____.
13. ☐ Other: _____.

ATTACHMENT – A: ADVISORY ACTION

1. This communication is in response to the Applicants' response dated January 21, 2005. Applicant's arguments filed on January 21, 2005 have been fully considered. Applicant's arguments, filed on January 21, 2005 under 35 U.S.C. 103 (a) are not persuasive.

Arguments

2.1 As per the applicant's argument that "The Krishnamurthy (KR) reference does not show the projection of an annotation on to a mesh; the cited passage, in CL 7, L39 - 45 refers to the preceding paragraph (CL7, L28-38) in which the start and end points are "two user points" (CL7, L32) that were manually selected by the user; thus, the example cited is not the projection of an annotation, but the smoothing (CL7, L 49) of a line selected by the user; this is explicitly specified in (CL6, L60-61) and (CL7, L1-2) where KR states that the user paints the curves directly; the two-step process described with respect to Figs 3B and 3C (CL7, L49 - 54) does not meet the requirements of all the independent claims that the process use a cutting plane to define the intermediate points between the two projected vertices; thus, the combination of RO and KR does not meet any of the independent claims", the Examiner respectfully disagrees.

Krishnamurthy teaches projecting two or more annotation vertices, being projected vertices, of an annotation onto the surface of the model, the annotation having annotation edges that connect pairs of the annotation vertices (CL7, L2-3; CL7, L27-29; CL7, L56-59). **Karaski**

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et al. teaches selecting a cutting plane between a pair of the projected vertices, in which the cutting plane is selected by the pair of projected vertices and a midpoint of the relevant annotation edge (CL3, L52-56; CL3, L67 to CL4, L3), because as per **Krishnamurthy** that would allow to precisely position these curves relative to surface geometry for effective curve drawing (CL1, L29-31) and compute a graph path between the start point and end point using a sequence of connected vertices of the mesh (CL7, L39-45).

2.2 As per the applicant's argument that "The Rose (RO) reference teaches annotating in the sense of displaying a text label on a video image; ...the teaching of RO is that of placing labels on an existing computer model, not in calculating a path length; the KA reference teaches a computationally intensive method of calculating accurately the length along a surface of a human figure; ... since KA measures clothes that will be worn, an accurate path length and precise positioning of the path are important for his purposes; in contrast, precise locations has no value for RO", the Examiner has used **Karaski et al.** only for selecting a cutting plane between a pair of the projected vertices, in which the cutting plane is selected by the pair of projected vertices and a midpoint of the relevant annotation edge.

Karaski et al. teaches selecting a cutting plane between a pair of the projected vertices, in which the cutting plane is selected by the pair of projected vertices and a midpoint of the relevant annotation edge (CL3, L52-56; CL3, L67 to CL4, L3), because as per **Krishnamurthy** that would allow to precisely position these curves relative to surface geometry for effective curve drawing (CL1, L29-31) and compute a graph path between the start point and end point.

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using a sequence of connected vertices of the mesh (CL7, L39-45); and as per **Karaski et al.** that would allow calculating the length of a path including points on the surface of a three-dimensional shape (CL3, L23-26; CL3, L43-45). While RO may not need precise locations, **Krishnamurthy** needs precise position of these curves relative to surface geometry for effective curve drawing and to compute a graph path between the start point and end point.

2.3 As per the applicant's argument that "Applicants disagree with the examiner's opinion and firmly maintain that the artisan would not be motivated to waste computational resources in calculating a path length that has no value for the primary reference; RO is concerned only with annotating a computer model, there is no motive or suggestion or a reason why there is benefit to RO to calculate precise locations of a path length on the surface", the Examiner takes the position that one who would want to annotate a surface with line segments would use the method of **Rose et al.** to annotate the surface. He would use the method of **Krishnamurthy** for projecting two or more annotation vertices, being projected vertices, of an annotation onto the surface of the model, the annotation having annotation edges that connect pairs of the annotation vertices. He will use **Karaski et al.** for selecting a cutting plane between a pair of the projected vertices, in which the cutting plane is selected by the pair of projected vertices and a midpoint of the relevant annotation edge. **Krishnamurthy** has the reason for projecting two or more annotation vertices and for selecting a cutting plane between a pair of the projected vertices of precisely positioning these curves relative to surface geometry for effective curve drawing and computing a graph path between the start point and end point using a sequence of connected vertices of the mesh. While one interested in annotating the surface with line segments may not

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have the same motive as **Krishnamurthy**, he will use the methodology of **Krishnamurthy** and **Karaski et al.** to achieve his objective.

2.4 As per the applicant's argument that "KU starts with raw data from a scanning operation and generates a 2-D view in the process clearing up false lines in his 3-D model... Kung is constructing the model, not annotating the model; thus, applying KU RO is not proper because RO already has a computer model', the Examiner takes the position that **Kung et al.** is used only for cutting the surface of the model with the plane, the plane intersecting the model on a cutting line.

2.5 As per the applicants' argument that "KA reference is inconsistent with the claims, in that the claims require that the vertices of the annotation edge are projected onto the model surface, while KA specifies the opposite...", the examiner has used **Krishnamurthy** reference against the claims.

Krishnamurthy teaches projecting two or more annotation vertices, of an annotation onto the surface of the model, the annotation having annotation edges that connect pairs of the annotation vertices (CL7, L2-3; CL7, L27-29; CL7, L56-59).

2.6 As per the applicants' argument that "it is not proper to reject the claims on selected portions of other references that are not addressing the same problem and would not be consulted by a worker in the field trying to construct a computationally economical method of mapping an annotation line to a surface", the examiner takes the position that computer based geometric models and surface models involving triangular mesh, vertices, edges and polygons were widely

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known at the time of applicants invention as shown by **Rose et al.** and **Krishnamurthy**.

Projecting edges and points on to the surface model was also known as shown by

Krishnamurthy. Cutting planes involving three points or surface normal and two points were

also known as shown by **Karaski et al.** and **Baker et al.**. Identifying the points on the edges that

fall on the cutting plane was known as shown by **Krishnamurthy**. Connecting the points to

form a path and determining the path between two points was also known as shown by

Krishnamurthy and **Karaski et al.** Any one interested in following a surface curve on the

surface model of the object would have combined the references to do the same, because there is

motivation to do it as explained in the Office action dated October 15, 2004 in Paragraph 13.1

and 15.1.

3. In view of the above explanation, the request for reconsideration has been considered but is not persuasive and does not place the application in condition for allowance.

K. Thangavelu
Art Unit 2123
February 19, 2005



SAMUEL BRODA, ESQ.
PRIMARY EXAMINER